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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,879

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Rod Walsh

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HARRINGTON & SMITH, PC
4 RESEARCH DRIVE
SHELTON, CT 06484-6212

EXAMINER

LU, XIAO QIN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,879	Applicant(s) WALSH ET AL.	
	Examiner XIAO QIN LU	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/30/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 rejected under 35 U.S.C. 102(e) as being anticipated by Albrow et al. (US Patent No: 6044086).

Albrow et al. (US Patent No: 6044086) discloses method and system for Control signal transmission, comprising following limitations.

Regarding claim 1, a method of creating signaling information (see “control signals are fragmented” as recited in abstract, lines 1-10) relating (see “coded into” as recited in paragraph 17, lines 1-10) to one or more available services (see “service” as recited in paragraph 17, lines 1-10) in a network (fig. 4), the method comprising the steps of: defining a service indicator (see “service data unit” as recited in paragraph 17, lines 1-10) for one or-more of the services (see “service” as recited in paragraph 17, lines 1-10); formulating (see “system control signals are fragmented” as recited in abstract, lines 1-10) the service indicator (see “service data unit” as recited in paragraph 17, lines 1-10) into a unique indicator having a predetermined format (control signal is framing into multiple equal predetermined packets, as shown in fig. 4); mapping the

unique indicator into one time-slot of a signaling channel (see “each fragment being sent in a different time slot of a frame” as recited in abstract, lines 1-10).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrow et al. (US Patent No: 6044086, in view of Sinnarajah et al. (US PG-Pub No: 20030114177).

Albrow et al discloses all the limitation as shown above, Albrow et al further discloses following limitations: regarding claim 2, using at least one service identifier (see “service data unit” as recited in paragraph 17, lines 1-10) relating to the one or more services (see “service” as recited in paragraph 17, lines 1-10).

However, Albrow et al. do not discloses following limitations: Regarding claim 2, using one or more identification data items for each of the selected services; using one or more data items identifying at least one user terminal having access to the broadcast network; and/or using one or more data items relating to transmission parameters of said network; Regarding 3, selecting a hash value calculation scheme; and calculating a

hash value for the service indicator; Regarding 4, selecting a hash value calculation scheme; and calculating a hash value for the unique indicator; Regarding 7, at least one user terminal is an International Mobile Subscriber Identity; Regarding 8, data item is an identification for a network cell; Regarding 9, network is a broadcasting network.

Regarding claim 2, using one or more identification data items for each of the selected services (see "service reference identifier (BSR_ID)," as recited in paragraph 36, lines 1-10); using one or more data items identifying at least one user terminal having access to the broadcast network (see "system ID SID" as recited in paragraph 60, lines 10-30); and/or using one or more data items (see "network ID NID" as recited in paragraph 60, lines 10-30) relating to transmission parameters of said network (see "identification" as recited in paragraph 60, lines 10-30).

Regarding 3, selecting a hash value calculation scheme (see "use hash function to determine" as recited in paragraph 60, lines 20-40); and calculating a hash value for the service indicator (see "a hash function for the subscriber stations belonging to the first class (type of service)" as recited paragraph 80, lines 1-15).

Regarding 4, selecting a hash value calculation scheme (see "use hash function to determine" as recited in paragraph 60, lines 20-40); and calculating a hash value for the unique indicator (see "a hash function for the subscriber stations belonging to the second class" as recited paragraph 80, lines 1-15).

Regarding 7, at least one user terminal (see "subscriber station users" as recited in paragraph 45, lines 5-25) is an International Mobile Subscriber Identity (see "an international subscriber station identifier (IMSI)" as recited in paragraph 60, lines 25-50).

Regarding 8, data item is an identification for a network cell (see “network ID NID” as recited in paragraph 60, lines 10-30).

Regarding 9, network is a broadcasting network (see “broadcast” as recited in paragraph 45, lines 1-10).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the invention of Albrow et al. by adding the features, as taught by Sinnarajah et al, in order to Use bandwidth efficiently by provide subscriber station to be able to consummate more than one services (paragraph 9, liens 5-15).

Claims 5, 6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrow et al. (US Patent No: 6044086, in view of Harris et al. (US PG-Pub No: 20020191583).

Albrow et al. discloses all the limitation as shown above, Albrow et al. further discloses following limitations: regarding claim 10, a communications device (subscriber unit 8 in fig. 3) comprising: first receiving means for receiving broadcast transmissions (see “receive signals from a base station” as recited paragraph 7, lines 1-10) comprising one or more services (see “service” as recited in paragraph 17, lines 1-10); second receiving means for receiving signaling information (see “in which control signal data fragments are received at a subscriber unit over time” as recited in paragraph 6, 1-10) on a signaling channel (see “broadcast channel” as recited in paragraph 4, lines 5-20).

However, Albrow et al. do not disclose following limitations: Regarding claim 5, creating a notification relating to said selected service , and transmitting the notification during the time-slot; Regarding claim 6, the notification comprises identification of one or more channels of the broadcast network transmitting the selected service; Regarding claim 10 means for controlling the first receiving means, wherein the first receiving means is enabled for receiving one or more services in the broadcast transmission upon received signaling information relating to said one or more services by the second receiving means; Regarding claims 11 and 12, periodically receive signaling information in a signaling channel during a specified time-slot; Regarding claim 13, means for generating an indication of the occurrence of the said time slot.

Harris et al. (US PG-Pub No: 20020191583) discloses Slot cycle assignment within a communication system, comparing following limitations.

Regarding claim 5, creating a notification (see “provides a positive indication to a mobile station that an unsolicited message is scheduled to arrive in the next paging slot” as recited in paragraph 25, lines 1-20) relating to said selected service (see “service” as recited in paragraph 6, lines 1-20), and transmitting the notification during the time-slot (see “provides a positive indication to a mobile station that an unsolicited message is scheduled to arrive in the next paging slot” as recited in paragraph 25, lines 1-20).

Regarding claim 6, the notification (see “provides a positive indication to a mobile station that an unsolicited message is scheduled to arrive in the next paging slot” as recited in paragraph 25, lines 1-20) comprises identification of one or more channels

(see “Paging Channel transmissions” as recited in paragraph 21, lines 5-20) of the broadcast network (see “broadcast” as recited in paragraph 3, lines 1-10) transmitting the selected service (see “service” as recited in paragraph 6, lines 1-20).

Regarding claim 10 means for controlling (602 logic circuitry in fig. 6) the first receiving means, wherein the first receiving means is enabled for receiving one or more services (see “unsolicited message is scheduled to arrive in the next paging slot” as recited in paragraph 25, lines 1-10) in the broadcast transmission (see “broadcast” as recited in paragraph 27, lines 5-20) upon received signaling information relating to said one or more services (see “Quick Paging Channel (QPCH), provides a positive indication to mobile station that an unsolicited message is scheduled to arrive” as recited in paragraph 25, lines 1-15) by the second receiving means (601 transceiver circuitry in fig. 6).

Regarding claims 11 and 12, periodically (see “periodically” as recited in paragraph 27, lines 1-10) receive signaling information (see “receive the paging channel message” as recited in paragraph 25, lines 8-27) in a signaling channel (see “next paging slot” as recited in paragraph 25, lines 1-10) during a specified time-slot (see “next paging slot” as recited in paragraph 25, lines 1-10).

Regarding claim 13, means for generating an indication of the occurrence of the said time slot (see “provides a positive indication to a mobile station that an unsolicited message is scheduled to arrive in the next paging slot” as recited in paragraph 25, lines 1-10).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the invention of Albrow et al. by adding the features, as taught by Harris et al., in order to provide better performance by reduces the time it takes to make a dispatch call (paragraph 7, lines 1-5)

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Danielson et al. (US Patent No: 6,934,284) discloses methods for establishing control signaling at link start-up.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Qin (Vincent) Lu whose telephone number is 571-270-3013. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on 571-272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

XL
03/28/2008

Xiao Qin (Vincent) Lu
AU 2616

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2616